THE EL PASO HERALD FARMING PAGE

DRY FARMING IN NEW MEXICO.

H. B. Henning, in the Dry Farming Congress Bulletin says that 1909 was the most important in the history of New Mexico in the development of agricultural resources, not less than 200,000 acres of new land having been brought under cultivation and double the acreage laid out for 1910. East of Las Vegas, mesa or table lands which three years ago were hardly selling at $5 an acre are now held at $15 and up. Three years ago, where Clovis now stands, was a vacant prairie; now it has 5000 people and many modern improvements and does a good business with a territory 50 miles each way. Melrose, Taiban, Blacktown, St. Vrain and other smaller towns of the east central section have had similar experiences in the beneficial effects of dry farming.

Tucumcari a Center.

Tucumcari though only seven years old, has 4000 people and not an idle piece of tillable land in a radius of five miles each way. Dry farming is responsible for 40,000 homestead entries and 7,000,000 acres of public land filed upon during the year.

The year 1909 taught the dry farmers a stern lesson, however. The three preceding years had been so replete with rainfall that dry farming methods did not seem necessary, but 1909 was below the normal in humidity and the majority of the farmers knowing little of the correct dry farming methods felt the drouth severely.

To Advertise Methods.

There is at present considerable interest shown in the desire to make dry farming methods better known. The last legislature of New Mexico appropriated money for the buying of a tract of land in the Tucumcari district for an experiment farm which will have expert dry farmers in charge, though the farmers of the neighborhood will operate it and pay the cost of maintenance. Similar experiment farms are being maintained in the Las Vegas district.

Another method to add to the education of the farmers has been instituted by the Santa Fe railway, which is now keeping professor J. D. Tinsley, formerly of the New Mexico College of Agriculture, in the field to instruct the people along its lines. He will organize farmers' institutes in every community and under each of these will be a demonstration farm to teach the best methods of seeding and tillage and to find out what crops are best suited to the various communities.

How To Preserve Fence Posts

FARMERS' Bulletin 387, by C. P. Willis, of the forest service, gives valuable information on method of preserving and prolonging the life of inferior woods that are suitable for fence posts. In former days durable woods were still plentiful and it was not then so necessary to think of methods for preserving them from decay, but now the time has come when inferior woods must be used in many regions.

The methods of preservation have for their object the arrest and prevention of the growth of fungi, which cause decay by destroying the wood tissues. One method is to coat the surface of well seasoned wood with paint to keep out moisture and the destructive fungi. The products of the distillation of coal tar and petroleum tar, however, possess the advantage of paint and are also antiseptics and poisonous to fungi. When in contact with the ground, wood decays very rapidly because the condition of moisture and temperature are favorable to the development of these fungi, consequently the portion of the post below ground should receive thorough treatment.

Prolonging Life of Posts.

Removing the bark to allow the wood to season more rapidly is a simple method of preserving posts.

Charring well seasoned posts over an open fire so that the burned portion will extend at least a foot above and below the surface of the ground is a good method where care is taken, not to allow the wood to check or to char too deeply.

Painting the surface does not give a very durable treatment because the cracks and checks are apt not to be well filled. Products of coal tar, such as creosote, applied hot, three coats for the butts and two for the tops are effective, 50 gallons of creosote furnishing enough for 300 posts.

Dipping is more lasting than painting and is a cheaper method of application. More of the preservative is required when dipping is practiced, but the less expensive ones like petroleum tar, coal tar and the creosotes may be used.

Dipping the butts of posts in cement is unsatisfactory because with the absorption of moisture by the wood the cement cracks and the covering is broken.

Impregnation With Creosote.

On account of the water in the wood cells, the thorough seasoning necessary before treatment, and the longer time necessary for penetration makes the method of applying preservatives cold not nearly so popular as that of dipping into hot ones. The "open tank" process is the best for treating posts with creosote. Their butts are immersed in creosote maintained at a temperature of 220 degrees F., which causes the air and water in the wood cells to expand enough to force their way out. They are next put into a tank containing cold creosote, or else left in the first tank and allowed to cool with the creosote, which causes the cells to contract again forming a partial vacuum into which the atmospheric pressure causes the creosote to enter. If it is desired to soak the entire post in the cold bath tank, this should be made larger than the one containing the hot creosote.

The best simple method for heating the creosote is to use a light, 14 gage, galvanized iron tank, three feet in diameter and four feet high, fitted with a U of three inch pipe, costing from $12 to $15. A fire is built under the U and the creosote is readily heated.

Small Posts Can Be Used.

A well impregnated fence post need not be over 5 inches in diameter, and is better than a split post. Those with highly colored heartwood, such as oak and yellow pine, are difficult to penetrate with creosote and will prove inferior to round posts. Cutting the tops of the posts obliquely, preferably with an ax, will facilitate the shedding of water. As already stated, posts should be well seasoned and trimmed of their bark before treatment.

The forest service used two methods of applying the preservative: In the first, only the butts were impregnated; in the second the butts were immersed in a hot bath and the entire post in the cold one. In order not to make the treatment too expensive the absorption should not be allowed to exceed 0.4 gallon per post if the butt only is treated, and 0.6 gallon if the whole post is immersed. It was found that naturally durable woods like cedar, locust, white oak and black walnut require a heavy treatment to impregnate their sap woods and that their heartwoods cannot be successfully treated. The treatment prolongs their period of usefulness, but even without treatment they cost more than cheaper and equally satisfactory posts that can be had by creosoting an inferior wood.

Cost of Treatment.

The cost of treatment varies with the local price of creosote. In the eastern states it is 12 to 15 cents a gallon; on the Pacific, 15 to 20 cents, and as high as 30 cents a gallon in the Rocky mountain region. About 20 percent of the amount of creosote absorbed is lost by evaporation from the hot bath, making the amount used per post 1 1-5 times the absorption. The cost of treatment per post varies between 6 and 9 cents and if properly creosoted should make posts last 20 years at least.

PLAN TO ABOLISH COEDUCATION.

San Antonio, Texas, June 4.—Claiming that the coeducational system in the local high school has not been a success, school superintendent Chas. J. Lukin has started a movement for its abolishment. His principal objection is based on the difficulty of enforcing strict discipline in classes where boys and girls are mixed.

Expelling Jews.

New York, June 4.—The American Jewish committee today received this cable from Berlin: "Expulsion continues throughout Russia. At the lowest estimate 30,000 victims are involved, 7000 of whom are from Kiev."

GRADING ALFALFA.

The National Hay association recognizes the following grades of alfalfa:

Choice alfalfa—Shall be reasonably fine, leafy alfalfa, of bright green color, properly cured, sound, sweet and well baled.

No. 1 alfalfa—Shall be coarse alfalfa of bright green color, or reasonably fine, leafy, of good color, and may contain 5 percent of foreign grasses, must be well baled, sound and sweet.

No. 2 alfalfa—Shall include alfalfa somewhat bleached, but of fair color, reasonably leafy, not more than one-eighth foreign grasses, sound and well baled.

No 3 alfalfa—Shall include bleached alfalfa, or alfalfa mixed with not to exceed one-fourth foreign grasses, but when mixed must be of fair color, sound and well baled.

No grade alfalfa—Shall include all alfalfa not good enough for other grades, caked, musty, grassy, or threshed.

The size of bale preferred by hay dealers is one that measures 27 to 36 inches in length, 18 inches wide, and 14 to 15 inches thick, ranging from 60 to 80 pounds each or from 33 to 25 bales to the ton. In this region the farmer finds best sale for those averaging 30 bales to the ton, making each bale weigh about 66 pounds.

RAIN AT YSLETA; APRICOTS ARE RIPE

Will Davis Sustains Broken Limb—Personal and General News.

Ysleta, Tex., June 4.—A shower fell Friday afternoon. However, farmers are not needing rain as there has been an abundance of canal water for irrigation. Apricots are ripe and ready for market.

Mrs. Finch and little son, of Divine, Tex., have joined Mr. Finch, who is assistant agent here.

Mrs. George Clements has returned from El Paso, where she went to meet Mr. Clements, who has been in California.

Will Davis, census enumerator, sustained a broken limb Friday afternoon, his horse falling with him.

Judge Foix has returned from a business trip to El Paso.

George Buchanan has returned from El Paso.

Miss Annie McSain is the guest of friends in El Paso.

Mrs. W. D. Lansden has returned from a visit to Mrs. Van C. Wilson and Mrs. S. T. Turner, of El Paso.

The Dorbandt home is nearing completion.

Mr. and Mrs. W. J. Bule will leave Sunday for Stamford, Texas, to attend the meeting of the Texas Press association. Later they will visit Fort Worth, Dallas and other points.

Removal sale bargains at Snyder Jewelry Co., 208 Texas.

Vaccination To Prevent Hog Cholera

To know that cholera may be prevented from carrying off one's hogs just as they are rounding into condition for the market is most satisfying. Vaccination is not recommended as a cure, though good results have been obtained when used on sick hogs; but its chief use is in protecting hogs that have been exposed to the disease and to control it should it break out.

There are two methods of vaccination, the first being known as the serum-alone method, the second as the simultaneous. The first is used on farms where the disease exists or where it is desirable to render the hogs immune for a short period. If after vaccination the hogs are exposed to cholera they become permanently immune, but if not exposed the immunity is only for two to three months.

The second method is practiced on farms that are not infected and where it is desired to render the hogs immune for a considerable period. In this method serum is used along with a dose of diseased or hog cholera blood.

Making a Test.

L. L. Lewis, professor of veterinary science, Oklahoma A. & M. college, has begun the distribution of hog cholera vaccine for which he makes a charge of one cent per cubicentimeter, making a dose for a hog weighing 30 to 100 pounds cost 20 cents; weighing 100 to 200 pounds, 40 cents; 200 pounds and over, 40 to 50 cents a dose. One quart of vaccine will make 40 doses for light hogs and may be used in syringes holding one dose or 20 c c. The diseased or hog cholera blood may also be secured at the Agricultural college, though this is sent to some graduate veterinarian in the neighborhood if no one can be spared from the veterinary laboratory, because its careless handling may cause a serious spread of disease.

Methods of Vaccination.

In using the serum-alone method light hogs are held up by their hind legs and vaccine is injected into the muscles or inside of the thigh, first inserting the needle into the muscle, then attaching the syringe. Heavy hogs are turned on their backs and vaccinated as with the lighter ones, and sows near the farrowing period may be vaccinated back of the ear where the skin is thin.

Wonderful Relation Between the Yucca and the Moth

OF ALL the interesting plants that belong to the Lily family, the yucca, a native of North and Central America, is by far the most remarkable. The mesas are covered with millions of Spanish bayonets and others of the yuccas and there is probably no plant so characteristic and well known in the west. How many are there, however, who have ever observed that this plant right at our doors offers the most wonderful example of the interrelation of flowers and insects.

By pollination is meant the tranference of pollen from the stamen, or male part of a flower, to the stigma, the female part. When this conveying of pollen is successful it gives rise to fertilization and the formation of seed. There are three processes of pollination: (1) Self or close pollination, in which flowers are pollinated often before they open, the pollen being deposited directly upon the stigma from the stamen. The violet is an example of self pollination. (2) Wind pollination, in which the wind carries the pollen from one plant to another, as in grasses and sedges. (3) Pollination by insects, in which the insects carry the pollen from the male to the female parts of the flower or flowers, for often the pistil may be in one flower and the stamen in another. Examples are the apple, pear, plum and other plants with attractive and prominent flowers.

Conveying the Pollen.

The yucca belongs to this last group, by their yellowish white color and agreeable odor the flowers are able to attract the insects necessary for their fertilization. Bees are the best known conveyers of pollen, but in the case of the yucca it is a moth of the night flying kind which when at rest folds its wings in a vertical position. It is known as the yucca borer, and is of a dusky color on its under surface and white on the upper surface, consequently when at rest on the white yucca flowers or flying about at dask it is difficult to detect. It has a structure peculiarly adapted to collecting the viscid pollen from the yucca flower, to rolling it into a ball and carrying it to another flower thus securing cross fertilization. The flower of the yucca opens on one day and closes the next, so at night the yucca borer visits the stamens, collects the pollen by means of her long tongue, rolls it into a pellet often several times larger than its head, and flies with it to another flower, where she bores a hole in the ovary and deposits her eggs inside. This done she deposits her ball of pollen on the ends of the stigmas, pollinating them which later causes the ovules of the flower to develop into seed.

Hatching Moth Eggs.

It is stated by Pammel that the eggs of the moth hatch on the fourth or fifth day, and that each of the resulting larvae will eat 15 to 20 ovules before it bites its way through the wall of the plant ovary. When outside, these little caterpillars lower themselves to the ground by means of a silken thread, enter the soil and cover themselves with an egg shaped cocoon. The following summer and about two weeks before the yucca blooms again, the larvae enters its third, or pupa, stage, and when the blooming period arrives it breaks its silken shell and appears as a tiny moth.

But for the moth, the yucca would be unable to produce seed, and without the fertilized ovule of the yucca flower the developing young of the moth would be without food. It must be a wonderful instinct that prompts the yucca boring moth to visit the flowers and collect the vitalizing pollen which indirectly furnishes food for her offspring.

Additional Dry Farming News on Pages 11 and 12.

POULTRY NOTES.

Eggs contain about the same amount of protein as wheat flower, 10 times the fat, and half the fuel value.

A woman poultry raiser in Massachusetts started five years ago with 12 hens and now carries on a business of $12,000 a year.

Do not set your hen where wind, rain or rats can bother her. Burn the straw after every hatch to keep lice from increasing too rapidly.

To break a hen of broodiness, put her into a coop made of a box with lath front and place this where she can see the other hens run constantly about. Place the food and water just outside so that she can reach her head through the bars and eat or drink; any kind of food will do, the corn is best withheld on account of its heating properties. In three to five days her motherly instinct has waned considerably and she soon renews laying. When hens are starved to break them of the desire to sit, the system becomes weakened and much time elapses before she regains strength enough to again begin the formation of eggs.

It is not necessary to have perches arranged in the form of a ladder. By placing them in the same plane, it is easier to remove the droppings in the morning, there is no fighting among the fowls to reach the highest perch, and the spread of colds from those below to those above is considerably lessened. campher ball placed in the drinking water is recommended for the prevention of spreading colds through this medium

In the fall put bands about the legs of the pullets and first year hens that begin to lay first, and observe them during the winter. In the spring select the best and put them into the breeding pen. In this way the non-producers will not be so apt to continue in your flock.